STUDENT ID NO							

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2019 / 2020

TEP 1241 ETHICS AND PROFESSIONAL CONDUCTS

(All Sections / Groups)

2 March 2020 2.30 p.m. – 4.30 p.m. (2 hours)

INSTRUCTIONS TO STUDENT

- 1. This question paper consists of FIVE pages only excluding the cover page.
- 2. Answer ALL FIVE structured questions.
- 3. Please write all your answers in the answer booklet provided.
- 4. Distribution of marks for each question is given.

STRUCTURED QUESTIONS [50 MARKS]

Instruction: Answer ALL FIVE questions.

QUESTION 1 [10 marks]

(a) In phase 3 of the evolution of cybertechnology and cyberethics, the availability of Internet access to the general public increased significantly. The ethical concerns raised in this phase include those affecting issues such as free speech, (legal) jurisdiction and anonymity. Based on this information, answer the following:

(i) What does the term *cyberethics* mean?

(½ mark)

(ii) What is meant by free speech?

(1/2 mark)

(iii) What is the ethical concern raised by the issue of free speech in phase 3?

(½ mark)

(iv) Why is anonymity an ethical concern in phase 3?

(½ mark)

(v) Explain the issue of (legal) jurisdiction in phase 3 by providing a short scenario.

 $(2 \times \frac{1}{2} \text{ mark})$

- (b) Utilitarianism is a consequence-based ethical theory that stresses on the importance of happiness in deciding if an action which is to be made, is morally good (or right) or bad (or wrong). Based on this information, answer the following:
 - (i) How would you differentiate between act utilitarianism and rule utilitarianism? $(2 \times \frac{1}{2} \text{ mark})$ Explain.
 - (ii) Why would *utilitarians* consider cheating or lying to be immoral? $(2 \times \frac{1}{2} \text{ mark})$
 - (iii) There are many disadvantages of utilitarianism. Which TWO (2) disadvantages of *utilitarianism* would be considered morally unacceptable to a *deontologist*? Why is that? Explain your answer from a deontological viewpoint. $(2 \times 1 \text{ mark})$
- (c) Provide a hypothetical scenario which concerns the issue of workers' privacy (workplace privacy issue) in an IT company that is facing work productivity issues. In your scenario, highlight how an IT manager who is a utilitarian and another IT manager who is a deontologist will have two different views (one based on utilitarianism and the other one based on deontology) on how to address/solve the problem faced by the IT company. Provide the philosophical reasons (based on the ethical theories of *utilitarianism* and *deontology*) for their different views.

 $(6 \times \frac{1}{2} \text{ mark})$

QUESTION 2 [10 marks]

- (a) To eliminate some criticisms against *professional codes*, Gotterbarn had argued for the need to distinguish **THREE** (3) different aspects of the *professional codes*, namely, codes of ethics, codes of conduct and codes of practice. Based on this information, answer the following:
 - (i) Explain Gotterbarn's THREE (3) aspects of the professional codes.

 $(3 \times \frac{1}{2} \text{ mark})$

- (ii) State an example for each of the THREE (3) aspects of the professional codes. $(3 \times \frac{1}{2} \text{ mark})$
- (b) Whistleblowing has been described as an act of telling the authorities or the public that the organization or company that you are working for is doing something immoral or illegal. Based on this information, answer the following:
 - (i) Why does whistleblowing lead to a moral dilemma for the whistleblower? (½ mark)
 - (ii) De George offered specific conditions when an engineer is either morally permitted to blow the whistle or morally obligated to blow the whistle. On the other hand, Gene James believed that De George's specific conditions were "too lenient". Why is that? Explain.
 - (iii) What is McFarland's view of obligating an engineer to whistleblow? (1/2 mark)
 - (iv) How would a *utilitarian* justify the act of *whistleblowing*? Explain with *utilitarian* principles. (1 mark)
 - (v) How would a deontologist justify the act of whistleblowing?

 Explain with deontological principles. (1 mark)
- (c) Deontology is an ethical theory that stresses on the concept of duty or obligations humans have to one another. There are two distinguishable versions of deontology namely, rule deontology (put forward by Immanuel Kant as the "categorical imperative) and act deontology (put forward by David Ross as "prima facie duties"). Based on this information, answer the following:
 - (i) In what way is act deontology better than rule deontology? (½ mark)
 - (ii) How is the "categorical imperative" different from Ross's "prima facie duties"? (½ mark)
 - (iii) What are "prima facie duties"? Explain. (½ mark)
 - (iv) Ross's "prima facie duties" include fidelity, reparation, gratitude, justice, beneficence, self-improvement and nonmaleficence. Choose any TWO (2) of these seven "prima facie duties", define the duty clearly and explain briefly how they can be applied by an IT professional in his or her work. (2 × 1 mark)

QUESTION 3 [10 marks]

- (a) The three classic theories of privacy include accessibility privacy, decisional privacy and informational privacy. Based on this information, answer the following:
 - (i) Choose any TWO (2) of these three classic theories of privacy and for each of these two choices, provide a relevant example that clearly explains the type of privacy that is involved. (2 × 1 mark)
 - (ii) How would you differentiate between "a loss of privacy" and "a violation of privacy"? Explain with the use of Moor's natural versus normative privacy distinction. (2 × ½ mark)
- (b) Hacking activities in cyberspace sometimes support 3 principles related to the "Hacker Ethic". The 1st principle is that "Information should be free" while the 2nd principle is that "Hackers provide society with a useful and important service". Based on this information, answer the following:
 - (i) Explain what these **TWO** (2) principles actually mean. $(2 \times \frac{1}{2} \text{ mark})$
 - (ii) How would a *utilitarian* point out that the 1st principle is morally right? Explain with *utilitarian* reasoning. (2 × ½ mark)
 - (iii) What is the *counterexample* to the 2nd principle as provided by Spafford? $(2 \times \frac{1}{2} \text{ mark})$
 - (iv) What is the 3rd principle (besides the two principles provided above)? Explain why this 3^{rd} principle is wrong according to Moor's *virtuality fallacy*. (2 × ½ mark)
- (c) Counter hacking is also known as active defense hacking. Counter hacking attacks are typically directed against those suspected of initiating the hacker attacks. Based on this information, answer the following:
 - (i) Counter hacking can be clearly distinguished as either preemptive or reactive. Explain the difference between these two types of counter hacking.

 $(2 \times \frac{1}{2} \text{ mark})$

- (ii) How would a deontologist point out that counter hacking is morally wrong? [Your answer must include deontological reasoning applied within the context of counter hacking.] $(2 \times \frac{1}{2} \text{ mark})$
- (iii) If counter hacking is to be considered a type of computer crime, would it be considered a cyberspecific crime, a cyberexacerbated crime or a cyberassisted crime? Explain the reason for your choice of answer. (2 × ½ mark)

QUESTION 4 [10 marks]

- (a) Virtue ethicists believe that a moral person is one who is necessarily disposed to do the "right thing". They correctly point out that when we engage in routine acts in our daily lives, we do not deliberate by asking ourselves, "What ought I to do in such and such a case?" Based on this information, answer the following:
 - (i) What is the main disadvantage of *virtue ethics* based on the information above? (½ mark)
 - (ii) An IT professional is faced with a *moral dilemma* of either loyally reporting his colleague's bad deeds (e.g. stealing the company's IT goods to sell for profit) to his superior or keeping quiet for the sake of his friendship with his colleague. How would this IT professional use *virtue ethics* to help him decide what to do next? Explain with the use of **TWO** (2) *virtues* in your answer. (3 × ½ mark)
 - (iii) While deontological and utilitarian ethical theories are either "action-oriented" or "rule-oriented", virtue ethics is instead "agent-oriented". What does the term "agent-oriented" mean and what is the advantage of this? (2 × ½ mark)
- (b) Both patents and copyrights protect software from theft under the law. As such, whenever consumers purchase software, they are required to accept the software license agreement as provided by the licensor and/or author of the software. Based on this information, answer the following:
 - (i) What is the difference between patents and copyrights? $(2 \times \frac{1}{2} \text{ mark})$
 - (ii) How does the software license agreement function? Explain. $(2 \times \frac{1}{2} \text{ mark})$
 - (iii) Why is software protected by both patents and copyrights? (1/2 mark)
 - (iv) Software is one example of a creation that is protected by *intellectual property* laws. How would you use the *utilitarian theory* (regarding property rights) to justify the protection of *intellectual property* such as software? $(3 \times \frac{1}{2} \text{ mark})$
- (c) Censorship in cyberspace has been used to suppress or deter certain forms of speech such as hate speech and defamation for both utilitarian and deontological reasons. Based on this information, answer the following:
 - (i) How would you describe censorship?

 $(2 \times \frac{1}{2} \text{ mark})$

- (ii) If a *utilitarian* should consider *censorship* to be morally right, what would be his or her reasoning for doing so? Provide a short example. $(2 \times \frac{1}{2} \text{ mark})$
- (iii) Why would a deontologist consider hate speech and defamation to be morally wrong? Explain with the deontological concept/principle of "universality".
 (2 × ½ mark)

QUESTION 5 [10 marks]

- (a) Authors who believe that *cybertechnology* favours *democracy* generally point to one or more of the following four factors, namely "openness", empowerment, *choice* and *access to information*. Based on this information, answer the following:
 - (i) What does the term democracy mean? Provide an example in your answer.

 $(2 \times \frac{1}{2} \text{ mark})$

(ii) Explain any TWO (2) of the four factors mentioned above.

 $(2 \times \frac{1}{2} \text{ mark})$

- (iii) Despite the Internet's open architecture that facilitates democratic values, some countries have instead managed to threaten democracy and restrict democratic ideals. Why is that? Provide an example. (2 × ½ mark)
- (b) Online communities take place when people with common interests come together in a virtual environment. While there are several positive benefits of such online communities, there are also negative aspects that results from such interactions in cyberspace. Based on this information, answer the following:
 - (i) One important negative aspect of *online communities* is "social polarization". What is "social polarization"? Why is it considered a negative aspect of *online communities*? (2 × ½ mark)
 - (ii) One example in which an *online community* is able to interact with others is a virtual environment. What is the ethical issue with such virtual environments? $(2 \times \frac{1}{2} \text{ mark})$
 - (iii) One argument that has been used to evaluate harm in *virtual environments* is the "argument from psychological harm". What is the point of this argument? Explain with an example. $(2 \times \frac{1}{2} \text{ mark})$
- (c) *Bioinformatics* is the application of the informatics model to the management of biological information. One of the main ethical concerns of *bioinformatics* is the role of *data mining* in threatening the *personal privacy* of individuals. Based on this information, answer the following:
 - (i) In the context of bioinformatics, how does data mining work? (½ mark)
 - (ii) Describe how the results of *data mining* technology can harm individuals. (½ mark)
 - (iii) How does data mining threaten personal privacy? $(2 \times \frac{1}{2} \text{ mark})$
 - (iv) The use of data mining in bioinformatics to threaten the personal privacy of individuals will likely be considered morally wrong according to deontology. Use deontological reasoning (both Kant's rule deontology as well as Ross's act deontology) to explain why that is so.

 (2 × ½ mark)
 - (v) The use of data mining in bioinformatics to threaten the personal privacy of individuals will likely be considered morally wrong according to utilitarianism. Use utilitarian reasoning to explain why that is so. (2 × ½ mark)